Grant Christie, citizen Patti Christie, citizen Cynthia DeCanis, citizen Debbie Manzari, citizen (Residential) Barabara Miller, citizen Dave Miller, citizen Kyle Ashmun, Ecosystem Services (Ag) Cynthia Bowman, Orange FSA (Ag) Michael Collins, Center for Natural Capital David Holtzman, PEC Greg Wichens, CSWCD Henny Calloway, CSWCD Spencer Yager, CSWCD (Ag) Charlie Lunsford, DEQ Rebecca Shoemaker, DEQ May Sligh, DEQ Bryant Thomas, DEQ Byron Petrauskas, Blue Ridge Environmental Solutions Jenny Biche, RRRC Michelle Edwards, RRRC

The meeting began at 6pm. Rappahannock-Rapidan Regional Commission Planner Michelle Edwards welcomed attendees and introduced May Sligh, DEQ. Byron Petrauskas, Blue Ridge Environmental Solutions, presented an overview of the TMDL study, and May delivered a presentation on the public process for development of the Implementation Plan. Greg Wichelns, Culpeper Soil and Water Conservation District, also summarized the implementation successes that have occurred in surrounding watersheds. The PowerPoint presentations and map of impaired segments are available at

http://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlimplementation/tmdlimplementationprogress.aspx.

The following participant questions arose during the presentations:

Q: Are streams that don't have a green or yellow marker (on the map) monitored? Does flow affect the results?

A: Yes, high flows and low flows affect the concentration of bacteria in the water. DEQ monitoring protocols account for this in the data. DEQ collects samples on a fixed schedule, which catches variable conditions—both high and low flow rates. The samples are generally collected bi-monthly, six times a year at our ambient stations. Long term trend stations are sampled bi-monthly as well.

Q: Are there any tributaries you would want more monitoring on? Are there any future potential monitoring sites?

A: Citizen monitoring can help identify hot spots and measure BMP effectiveness. DEQ is not looking for more monitoring stations. The monitoring stations are moved around. They collect samples at one location for 2 years, then stop monitoring at that station for 4 years, then go back to that station and collect samples again for 2 years. The TMDL is based on the whole watershed and considers bacteria sources throughout the whole watershed. The monitoring stations target specific areas but the TMDL and TMDL-IP includes the whole watershed, not just the impaired segments.

Q: Are the streams denoted in blue on the map not impaired because there is no bacteria or due to the fact that they are not monitored?

A: Generally blue stream reaches indicate those streams either not impaired at the time the TMDL was done or since the last Integrated Report (draft 2014), but there may be cases where there is a lack of sufficient monitoring data to make the determination that the stream is meeting water quality standards. The DEQ monitoring stations are denoted with green markers on the project map that has been distributed.

Q: What is the single largest contributor of bacteria?

A: The livestock load is probably the largest bacteria contributor (According to the TMDL study, runoff from pastures used for grazing animals accounts for the largest loading (indirect) with the consideration of other variables, including precipitation, proximity to streams, etc). Straight pipes are illegal and 100% of them need to be identified and replaced.

Q: Will the TMDL-IP include a geographic prioritization?

A: As a group, won't identify geographic prioritization at tonight's meeting, but in future meetings we will want your input on what those geographic prioritization areas might be. With such a large area, the district(s) and other partners would want to start implementation in an area where there is a larger concentration of BMP opportunities (lots of cows that need to be fenced in from the streams, for example).

Q: How do you advertise these public meetings? How do you intend to get the word out?

A: It's difficult to know how to best reach people. RRRC/DEQ staff distributed fliers around the area, submitted information to the local newspapers, and sent e-mail notifications to stakeholders requesting that they share the information with others. Any suggestions on how best to accomplish this are welcomed.

Posting signs and mailing letters to landowners was suggested. Specific areas for the fliers/posters include The Light Well restaurant and other popular local businesses. Using social media was also suggested.

Q: Is there an agency who can identify folks who live along the river that you can send e-mails to?

A: No, there is no agency that has contact information of landowners along the river. We have compiled an extensive stakeholder contact list, but there is no one agency that has that information. We piece together what we can.

Q: That seems like an amazing amount of work [CSWCD] has done. It is very encouraging to see. Is that unusual in the state?

A: A few Districts are going after the 100% cost share money. There are 47 SWCDs in the state and 12 have a high work load—Thomas Jefferson, Lord Fairfax, for example. The Rapidan TMDL was completed in 2007. Since then, 52 miles of stream fencing has been installed in the CSWCD district portion. Another 21 miles includes volunteer fencing, which is fencing that was installed without using any cost share monies. Farmers are paid \$1 per foot per exclusion fencing if maintained for 5 years. If cost share is used, then the maintenance agreement is for 10 years. In total there are 73 miles of fencing that includes cost share & volunteer fencing.

Q: When does cost-share end, when the money runs out or when the goals are completed?

A: Cost-share is distributed on a competitive basis dependent on the funding available. Even if traditional sources of funding are not available (ie., 319), DEQ and various stakeholders involved in the implementation projects will look for other funding sources to assist with BMP cost share needs.

Working Group Session

The residential and agriculture working group sessions were combined and began after the formal presentations. Discussion questions and participant feedback that followed included:

Are there any other bacteria sources, besides what is listed in TMDL study?

• No, there is no industry in the area.

What is the local perception regarding the presence of straight pipes, failing septic system, and failing on-site sewage disposal systems, sewered areas in the local watershed (s)?

No response

Are there problems? Know areas with poor soils?

• No areas with poor soils are known.

How significant is the horse population?

- It is spotty at best.
- There are a couple of thoroughbred retirement and rescue facilities.

What would be the best ways to outreach to local citizens about grant funds for agriculture BMPs?

- Post flyers at the farmer co-op, Lowe's and Tractor Supply stores
- One-on-one basis
- Focus on portions of the watershed where the impairments are located
- The Center for Natural Capital has a crowd funding platform (*Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet*) that can be utilized, but the Center would need to be reimbursed for its efforts

What is the public perception about pets/dogs being a bacteria source?

- Pet waste is not seen as a problem
- The area is mostly rural; one dog on 200 acres is not really a problem

Are there hunt clubs, dog kennels, veterinary hospitals, boarding facilities that should be considered as potential sources?

- There is a kennel in Orange and a Chesapeake Bay retriever kennel adjacent to the Rapidan River; there may be other kennel/dog breeders in the watershed
- There are hunt clubs; contacting fox hunters was suggested

Is there any need of local pet waste ordinances?

- A comment was made that there is not a need for pet waste ordinances
- Many participants were unsure of whether there were existing ordinances and thus whether there was a need

Are there opportunities to improve stream buffers in the area? Do you know of specific areas where this may be possible?

- Lack of forested floodplain is a significant issue, and there is an opportunity to work with landowners to establish forested buffers
- The biggest issue is stream bank erosion, but stream fencing alone does not help; instead need stream buffers. The cost-shared practices for stream fencing offered through federal and state programs require vegetated buffers or forest buffers with various width requirements.
- Need to provide landowners with longer than CREP's 15-year funding in order to provide enough incentive
- Need to get Department of Forestry and Virginia Outdoors Foundation involved in the planning process if reforestation or conservation easements are discussed.